Extract-Specific Maintenance Functions

Copy Extracts - Code C

If you copy an extract which contains objects, an asterisk is displayed next to field Edit: Objects. Enter Y in this field. The system behavior depends on the editor you are using.

- If you are using the **SAG** Editor, the Extract Object Editor is called. See Extract Object Editor. To copy the extract with objects, this list must be cataloged, otherwise the extract will be copied without objects.
- If you are using the **Natural** Editor, the Link Objects to Extract function is called. See Link Objects to Extract - Code E. If you confirm the object list that is displayed with ENTER, the extract is copied with objects.

Operate on Extracts - Code T

With this function, the result of a set operation is added to the objects in the current extract (if parameter Drop existing objects is set to N) or the extract will correspond exactly to the result of the set operation (parameter Drop existing objects=Y). See Overview of Operation available for Function Operate on Extracts.

> **Note:**
> An object may only be contained in a maximum of 32 extracts. If an operation would lead to one or more objects being contained in more than 32 extracts, the object(s) already contained in 32 extracts are displayed and the user has the following possibilities:
> - the objects are not entered in the object list of the extract, or
> - the original object list is restored.

```
   13:46:47              *****  P R E D I C T  4.2.2  *****              2002-07-31
                            - Operate on Extracts -
 Extract ......... HNO-ET1                        Added 2002-07-31 at 13:04
                                                Modified 2002-07-31 at 13:41




    Operation ..............*
    Drop existing objects ... N (Y/N)

    Search criteria
      Extract ID ............


    Restrictions ...........*   Profile HNO ,empty
```

Parameters	
Extract	ID of the extract to be processed with this operation.
Operation	Enter one of the following values: **U** Union You can select any number of extracts. All objects in the selected extracts are added to the current extract. **D** Difference Mark one extract with X, the other with Y. Objects that are contained in extract X but not contained in extract Y are added to the current extract. **I** Intersection You can enter any number of extracts (but at least two). Objects that are contained in all of the selected extracts are added to the current extract. See Overview of Operation available for Function Operate on Extracts.
Drop existing objects	**Y** Existing objects are removed from the object list of the extract. **N** New objects are added to existing objects in the extract. This parameter must be specified.
Search criteria	
Extract ID	With this selection criterion you can limit the scope of objects to be displayed for selection. **blank** All extracts are displayed for selection. **ABC*** All extracts starting with ABC are displayed for selection. A unique extract ID makes sense only for the operation Union, because for Difference you must specify two and for Intersection you need at least two extracts.
Restrictions	Additional criteria can be selected to restrict the scope of extracts to be processed.

Selecting Extracts

Enter the parameters above to display a list of extracts which meet the selection criterion Extract ID and any restrictions you may have entered. See example below.

```
   13:35:03              *****  P R E D I C T  4.2.2  *****           2002-07-31
   Plan  11                  - Select Extract from a list -


   Cmd  Extract ID

    __    HNO-ET-123
    __    HNO-ET-124
    __    HNO-ET-2
    __    HNO-ET1
    __    HNO-ET2
    __    HNO-ET3
```

- For the operation **Union** you can select any number of extracts by marking them with /, X or S in the Cmd column.
- For the operation **Intersection** you can select any number of extracts - but at least two - by marking them with /, X or S in the Cmd column.
- For the operation **Difference** you must mark one extract with X and one with Y.

If you enter another command in the Cmd column, this command is added to the workplan. Enter an asterisk in this column to display the valid commands.

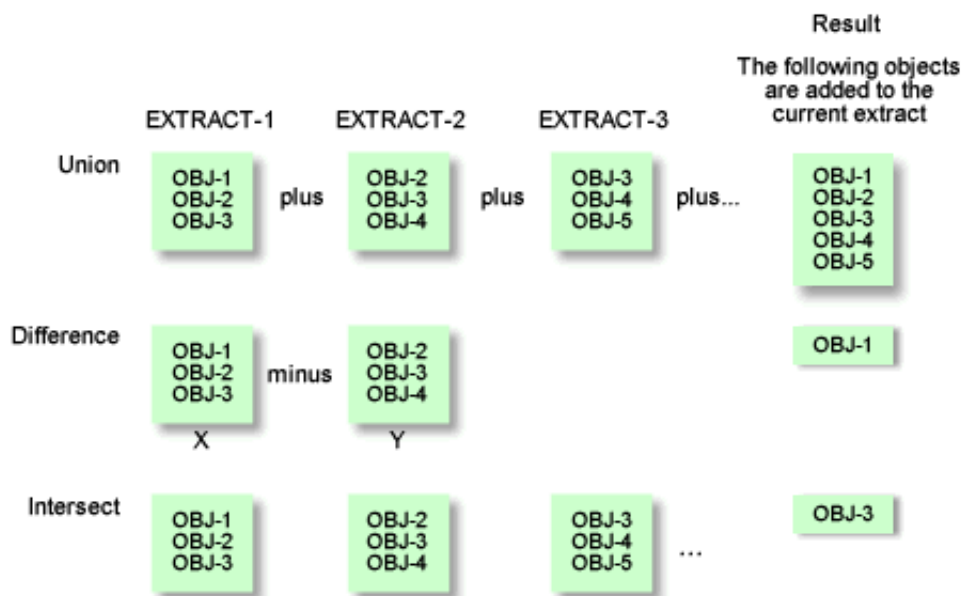**An Object can be contained in up to 32 Extracts**

Objects which you want to add to the object list of the current object, but which are contained in 32 extracts already, are listed as shown in the screen below.

```
   13:27:32              *****  P R E D I C T  4.2.2  *****           2002-07-31
                             - Operate on Extracts -

   Following objects are already in 32 Extracts:

   Program .......... GER-PR
   Program .......... ARH-PR
```

If you confirm this list with ENTER, a window appears in which you can enter a backout option.

Enter backout option	**Y** Terminate the operation. No new objects are added to the current extract. **N** Continue the operation. Objects linked to fewer than 32 extracts are linked to the current extract. Objects already linked to 32 extracts are not added to the current extract.

Overview of Operations available for Function Operate on Extracts

Export an Extract - Code U

This function transfers data from a Predict environment to an ALF file. Workfile 1 is the transfer medium. The following default parameter settings apply:

```
With code    N
With profile   N
With internal ID  Y
Include Extracts  N
Target environment S
```

The parameters are described in detail under Export in the section **Coordinator Functions** in the **Predict Coordinator documentation**.

Edit/Link Objects - Code E

With this function you skip the Modify Extract screen to edit the object list directly. The system behavior depends on which Editor is activated.

- If you are using the Software AG Editor, the Object List Editor is called. See Extract Object Editor.
- If you are using the Natural Editor, the function Link Objects to Extract is called. See Link Objects to Extract - Code E.

Extract Object Editor

This editor is available when you are using the Software AG Editor. This editor is called

- with function code E from the Extract Maintenance Menu
- with the functions Add/Copy/Modify Extract: by entering Y in the field EDIT Objects
- with the command EDIT EXTRACT OBJECTS <Extract-id>.

```
 10:20:26                      - Extract : HNO-ET -                      2002-07-31
       Extract object                     Type Subtype
 *****  ********************** top of list **********************
 00001  HNO-BT                            FI    B
 00002  HNO-D2                            FI    D
 00003  HNO-A                             FI    A
 00004  HNO-H                             DA    E
 00005  HNO-D                             FI    D
 00006  HNO-E                             FI    E
 *****  ******************** bottom of list *********************
```

All functions of the Software AG Editor are available. See the section Editors in Predict in the **Predict Reference documentation**.

Meaning of Columns	
Extract object	ID of the object contained in the extract.
Type	Object type of the object. If you enter objects manually, you must enter ID and type.
Subtype	Subtype of the object (if applicable). If you enter ID and object type manually, the subtype is entered automatically. If an object type does not have any subtypes, this column is blank. Dummies are marked with a question mark.

Selecting Objects

With the **SEL** command you can

- add objects of a specific type to the extract, see below
- add objects of any type to the extract, see Adding Objects of any type.

With the line command **H** you can add objects to a specific position in the list.

Adding objects of a specific type

Enter the SEL command. The following screen appears in which you must enter an object type.

```
 10:40:29              ***** P R E D I C T   4.2.2  *****              2002-07-31
 Plan  11                  - Object Selection Menu -              Profile HNO

 Extract ID ......... HNO-ET
                                                  Modified 2002-07-31 at 10:07
                                                          by HNO
 Select object type ............*
```

The following screen appears, for example, if you specify object type DA.

```
   11:02:31              *****  P R E D I C T  4.2.2  *****              2002-07-31
   Plan  11                    - Database Selection Menu -            Profile HNO


   Extract ID ......... HNO-ET

                                                        Modified 2002-07-31 at 10:07
                                                          by HNO
   Select object type ............. DA  ( Database )


   Retrieval type .....* D
   Output mode ........* S Select


   Search criteria
     Database ID .......                              Database of type*
     Belongs to VM .....                              Database number .






   Restrictions .......*    Profile HNO,used
                                                        Association ....*
```

Alternatively you can enter one of the following commands in the Extract Object Editor:

- SEL DA, to restrict the selection to objects of type DA, or
- SEL DA ABC*, to restrict the selection to objects of type DA which start with ABC. If only one object starts with ABC, the Database Selection Menu is skipped.

From this screen you can execute any retrieval function for which the output mode Select is valid. For Databases, for example, the following functions can be executed:

- Databases
- Dummy/Placeholder databases
- Databases with no parent
- Databases with no child

You can limit the scope of the function using selection criteria and output options. All objects which meet the selection criteria and output options are listed.

```
   08:13:54              *****  P R E D I C T  4.2.2   *****             2002-07-31
   Plan  11                    - Select Database -

   Cmd   Database ID                          Type           P-DBnr  Run Mode

   __    HNO-DA1                              ADABAS C          122  Isolated
   __    HNO-H                                Gen. SQL Handler  111  Local
   __    HNO-LEASY                            Other Handler     254  Local
   __    JPE-10                               Conceptual
```

From this list you can either

- select objects with /, S or X in the Cmd column to add them to the extract, or
- add functions to the workplan by entering a command other than /, S or X in the Cmd column. Enter an asterisk in the Cmd column to display the commands valid for the particular object.

Adding Objects of any type

To add objects of any type to the extract, enter one of the following commands in the Extract Object Editor:

- SEL ALL, or
- SEL, and leave the field Select object type in the Object Selection Menu empty.

The following screen appears:

```
10:38:50                ***** P R E D I C T  4.2.2 *****              2002-07-31
 Plan  11                    - Object Selection Menu -               Profile HNO

  Extract ID ......... HNO-ET

                                                       Modified 2002-07-31 at 10:07
                                                             by HNO
  Select object type .............    ( All objects )

  Retrieval type .....* D
  Output-mode ........* S Select

  Search criteria
    Object ID ........
```

For object type All, only two retrieval functions are possible:

- Objects (Code D)
- Dummy Objects (Code C)

Objects of all types (except Field and Owner) are displayed for selection.

The only selection criterion is Object ID. With asterisk notation you can specify a range of object IDs.

You can only specify restrictions valid for all object types:

- Keywords
- Owner
- in Extract
- containing the string
- from date

A selection screen is displayed for each object type containing all objects that meet the selection criterion Object ID and any restrictions specified.

From this list you can

- select objects to be included in the extract by marking them with /, X or S in the Cmd column, or
- put functions in the workplan. Enter a command other than /, X or S in the Cmd column. Enter an asterisk in this column to display the commands valid for the respective object type.

All objects selected are added to the extract.

Extract-Specific Editor Commands

SORT N[AME] Objects are sorted by columns Extract object and Type.

SORT [[T]YPE] Objects are sorted by columns Type and Extract object.

Saving the Object List

When you have put all objects you require in the extract, enter CAT or SAVE to save the object list.

The following objects may not be added to the extract:

- duplicate objects
- non-existent objects (for example due to a typing error when adding objects manually)

If any duplicate or non-existent objects are contained in the list, the following screen appears:

```
   13:25:49                    - EXTRACT : HNO-ET -                2002-07-31
         EXTRACT OBJECT                    TYPE SUBTYPE
   00002  HNO-FI2                          FI



         Correct the error,
         hit     ENTER to return to the editor
         or enter  D   to remove object

   DIC2519 FILE DOES NOT EXIST.
```

This screen offers you the following possibilities:

- Correct the error by overwriting an incorrect object ID or changing the type.
- Remove the object from the list by entering D in the prefix area on the left of the screen.
- Return to the editor by pressing ENTER.

When the list is cataloged, the extract will be added to every object in the list.

Link Objects to Extract - Code E

With this function you can add objects of a specific type to the current object or remove objects from this extract. This function is available if you are using the Natural Editor and is called using one of the methods below:

- with function code E in the Extract Maintenance Menu
- with the function Add/Copy/Modify Extract: by entering Y in the EDIT Objects field.
- with the command EDIT EXTRACT OBJECTS <Extract-id>.

The following screen appears:

```
   15:13:20              *****  P R E D I C T  4.2.2  *****         2002-07-31
   Plan  11                   - Link Objects to Extract -

   Extract ID ....... HNO-ET                        Modified 2002-07-31 at 13:20
                                                             by HNO


   Link to object type ..*
```

Enter an object type to add objects of this type to the extract.

Note:
With this function you cannot enter objects of all object types in a single operation.

If you specify object type DA, for example, the following screen appears:

```
   15:48:34              *****  P R E D I C T  4.2.2  *****              2002-07-31
   Plan  11                   - Link Objects to Extract -

   Extract ID ....... HNO-ET                         Modified 2002-07-31 at 13:20
                                                            by HNO


   Link to object type ..* DA ( Database )


   Search criteria
     Database ID ......... *
     Type .............. *
     Database number .....
     Belongs to VM .......




   Restrictions .........*   Profile HNO ,used                List option ....* A


   Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
         Help  Next  Stop  Last  LnkEl Flip  Print Impl  AdmFi SelFi Prof  Main
```

Limiting the Scope of Objects for Selection

The following possibilities are available to limit the scope of selection.

- **Search Criteria and Restrictions** The available search criteria depend on the object type. For object type database, for example, you can restrict the selection with the criteria Database ID, Type, Database number and *Belongs to VM*. You can also specify Restrictions to further limit the selection.
- **List Option** This parameter determines which objects are displayed for selection.

List option	**A** All objects that meet the selection criteria and restrictions are displayed for selection. **L** Only objects that meet the selection criteria and restrictions and that are linked to the current extract are displayed for selection. **U** Only objects that meet the selection criteria and restrictions and that are not yet linked to the current extract are displayed for selection.

The following screen appears for object type DA:

```
   09:52:53                 *****  P R E D I C T  4.2.2  *****              2002-07-31
                             - Link Objects to Extract -

   Extract ID ....... HNO-ET

    CMD L Database                          Type              P-DBnr  Run Mode

      _       HNO-DA1                       ADABAS C             122  Isolated
      _  L    HNO-H                         Gen. SQL Handler     111  Local
      _       HNO-LEASY                     Other Handler        254  Local
```

Meaning of Columns	
CMD	Enter one of the following commands: **L** Link the object to the current extract. **U** Unlink the object from the current extract.
L	An L in this column indicates that the object is already contained in the current extract.

The other columns are type-dependent.

Build/Extend an Extract - Code B

With this function you can create or extend the object list of an extract. The following screen is displayed:

```
   10:56:01                 *****  P R E D I C T  4.2.2  *****              2002-07-31
   Plan   0                   - Build/extend an Extract -             Profile HNO

   Extract ID ...... HNO-ET                              Added 2002-07-31 at 09:54
                                                      Modified 2002-07-31 at 10:02

   Build Extract for object type ..*
```

Parameters	
Extract ID	ID of the extract whose object list is to be added or extended.
Build extract for object type	Enter one of the following values here: **<code>** The two-character code of a predefined or user-defined object type. Objects of this type are added to the extract. See Build/Extend an Extract for a specific object type. **blank** All object types. See Build/Extend an Extract for all object types

Build / Extend an Extract for a specified Object Type

This example shows the screen for the object type Database.

```
    14:37:38              *****  P R E D I C T  4.2.2  *****              2002-07-31
    Plan  11                  - Build/extend an Extract -              Profile HNO

    Extract ID ......... HNO-ET

                                                      Modified 2002-07-31 at 13:40
                                                          by HNO
    Build Extract for object type ..* DA  ( Database )

    Retrieval type .....*
    Output mode ........* S Select

    Search criteria
      Database ID ....... *                           Database of type*
      Belongs to VM .....                             Database number




    Drop existing objects N (Y,N)
    List objects ........ Y (Y,N)

    Restrictions .......*   Profile HNO,used          Model ..........*
    Output options .....*   Profile HNO               Association ....*
```

Parameters	
Retrieval type	All retrieval functions are available.
Output mode	The valid values depend on the retrieval type. Enter an asterisk to display the possible values.
Object ID	Asterisk notation is possible to specify a range of object IDs.
Search criteria	Search criteria can be used to restrict the function further. These additional selection criteria are type-dependent.
Drop existing objects	**Y** Objects that are already contained in the extract are deleted. **N** New objects are added to the objects already contained in the extract.
List objects	Objects are displayed or suppressed. The default value is taken from the profile parameter Maintenance options > List action.
Restrictions	You can use Restrictions to further limit the scope of objects for selection. See Restrictions in the section **Retrieval** in the **Predict Reference documentation**.
Output options	With output options you can determine the amount of information displayed. See Output Options in the section **Retrieval** in the **Predict Reference documentation**. The valid output options depend on Object type, Retrieval type and Output mode.

Build / Extend an Extract for all Object Types

```
   13:13:58              *****  P R E D I C T  4.2.2  *****              2002-07-31
   Plan   0                  - Build/extend an Extract -              Profile HNO

   Extract ID ...... HNO-ET                            Added 2002-07-31 at 09:54
                                                    Modified 2002-07-31 at 10:02

   Build Extract for object type ..*     ( All )

   Retrieval type .....*
   Output-mode ........*

   Search criteria
     Object ID .........



   Drop existing objects N (Y,N)
   List objects ........ Y (Y,N)

   Restrictions .......*   Profile HNO,used
   Output options .....*   Profile HNO
```

Parameters not listed here are described above. See Build/Extend an Extract for a specific object type.

Parameters	
Retrieval type	With object type All, the following retrieval types are available: **D** Objects **C** Dummy/Placeholder Objects.
Output mode	**L** All objects that meet the selection criterion Object ID and the restrictions are put in the extract. **S** All objects that meet the selection criterion Object ID and the restrictions are displayed for selection. Enter /, X or S in the Cmd column to add objects to the extract. If you enter a command other than /, X or S in this column, the command is added to the workplan.
Object ID	Asterisk notation is possible. Object ID and Restrictions are the only additional selection criteria for object type All.
Output options	Only output options valid for all object types are displayed. **Note:** As you can only use output modes List and Select for this function, only the following output options are applicable: ● No. Abstract lines ● Mark implementation ● Cover page

Purge Extract - Code P

This function deletes extracts and all links to other objects.